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10/609,162	06/26/2003	Kimihiko Sano	03383/LH	7848

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EXAMINER

SIMONE, CATHERINE A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/609,162

Applicant(s)

SANO ET AL.

Examiner

Catherine Simone

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/26/03 and 3/4/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "thin-plate-like" in claims 1-27 is a relative term which renders the claims indefinite. The term "thin-plate-like" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The recitation "thin-plate-like" is deemed vague and indefinite. It is unclear what is meant by "thin-plate-like"? Clarification is requested.

Claims 12 and 13 recite the limitation "the plurality of gap portions". There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-20, and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 8-1916.

JP 8-1916 discloses a thin plate-like protective film comprising a thin plate-like material main body (Fig. 8, #3) which protects a protected thin plate-like material structure, wherein projections (Figs. 7 and 8, #4) are arranged continuously in predetermined areas of the thin plate-like material main body so as to extend from the main body, the projections each having a crown portion (Fig. 7, at the tip of #4), a surface of which is substantially parallel with a main surface of the protected thin plate-like material structure, and a side wall portion surrounding the crown portion (Fig. 7, #4). Regarding claim 4, the side wall portion is inclined (Fig. 7, #4). Regarding claim 5, the crown portions of the plurality of projections project in different directions from the main surface of the thin plate-like material main body (Fig. 7, #4). Regarding claim 6, the plurality of projections include first projections (Fig. 7, #4) projecting from one surface of thin plate-like material main body, and second projections (Fig. 7, #4) projecting from the other surface of thin plate-like material main body, the first and second projections being arranged alternately along a direction in which the projections are arranged (Fig. 7, #4). Regarding claim 7, the plurality of projections have an equal width in the direction in which the projections are arranged (Fig. 1, #23). Regarding claim 8, the plurality of projections have different widths in the direction in which the projections are arranged (Fig. 7, #4). Regarding claim 9, the plurality of projections are line-symmetrically arranged (Fig. 1, #23). Regarding claim 10, the plurality of projections are non-line symmetrically arranged (Fig. 7, #4). Regarding claims 11-13, a gap portion is formed between the plurality of projections (Fig. 7, #4) wherein some of the plurality of gap portions have an equal length and some of the plurality of gap portions have different

widths. Regarding claim 14, the projection is generally trapezoidal as viewed from an end surface side of the thin-plate-like material main body (Figs. 1 and 6, #23). Regarding claim 15, the projection is U-shaped as viewed from one surface side of the thin-plate-like material main body (Fig. 1, #23). Regarding claim 16, the projection is generally semicircular as viewed from one surface side of the thin-plate-like material main body (Fig. 7, #4). Regarding claims 17 and 18, the protected thin-plate-like material structure comprises interconnect patterns and electronic components so that the predetermined areas of the thin plate-like material main body are not superimposed on the interconnect patterns or electronic components (Figs. 7 and 8; also see page 2, paragraph 0002). Regarding claim 19, the electronic components are semiconductor chips (see page 2, paragraph 0002). Regarding claim 20, the thin-plate-like material main body is long enough to protect the protected thin-plate-like material structure which is also long (see Figs. 7 and 8). Regarding claim 23, the thin-plate-like material main body has a sheet form so as to protect the protected thin-plate-like material structure, which also has a sheet form (see Figs. 7 and 8). Regarding claim 24, the predetermined areas of the thin-plate-like material main body are two opposite side areas of the thin-plate-like material main body (Fig. 7, #4). Regarding claim 25, the predetermined areas of the thin-plate-like material main body are at least four side areas of the thin-plate-like material main body (Fig. 3, #23).

Regarding claim 26, JP 8-1916 discloses a thin-plate-like protective film comprising a long thin-plate-like material main body which protects a long protected thin-plate-like material structure (Fig. 3), wherein conductive layers (see page 7, paragraph 0012) are provided at least in areas of the thin-plate-like material main body other than at its widthwise opposite ends.

Regarding claim 27, the conductive layers are provided on respective surfaces of the thin-plate-like material main body (see page 7, paragraph 0012).

5. Claims 1, 2, 4, 7, 9, 11, 12, 17-23 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamuro et al. (US 4,633,370).

Hamuro et al. discloses a thin plate-like protective film comprising a thin plate-like material main body (Fig. 1, #1) which protects a protected thin plate-like material structure, wherein projections (Fig. 1, #4) are arranged continuously in predetermined areas of the thin plate-like material main body so as to extend from the main body (see col. 3, lines 25-30), the projections each having a crown portion (Figs. 1-4, #8), a surface of which is substantially parallel with a main surface of the protected thin plate-like material structure, and a side wall portion surrounding the crown portion (Figs. 1-4, #8). Regarding claim 2, a surface of the crown portion is a plane (Figs. 1-4, #8). Regarding claim 4, the side wall portion is inclined (Figs. 1-4, #8). Regarding claim 7, the plurality of projections have an equal width in the direction in which the projections are arranged (see col. 3, lines 25-55). Regarding claim 9, the plurality of projections are line-symmetrically arranged (Fig. 1, #4). Regarding claims 11 and 12, a gap portion (Fig. 1, between #4) is formed between the plurality of projections (Fig. 1, #4) wherein some of the plurality of gap portions have an equal width. Regarding claims 17 and 18, the protected thin-plate-like material structure comprises interconnect patterns and electronic components (Fig. 1, #2) so that the predetermined areas of the thin plate-like material main body are not superimposed on the interconnect patterns or electronic components. Regarding claim 19, the electronic components are semiconductor chips (see col. 3, line 62). Regarding claim 20, the thin-plate-like material main body is long enough to protect the protected thin-plate-like material

structure which is also long (see col. 3, lines 25-30). Regarding claim 21, the protected thin-plate-like material structure comprises sprocket holes (see col. 3, lines 56-61) so that the predetermined areas of the thin plate-like material main body are in proximity to the sprocket holes. Regarding claim 22, the protected thin-plate-like material structure comprises sprocket holes (see col. 3, lines 56-61) at its widthwise opposite ends, and the predetermined areas of the thin-plate-like material main body are widthwise opposite ends of the thin-plate-like material main body. Regarding claim 23, the thin-plate-like material main body has a sheet form so as to protect the protected thin-plate-like material structure, which also has a sheet form (see Fig. 1 and col. 3, lines 25-30). Regarding claim 25, the predetermined areas of the thin-plate-like material main body are at least four side areas of the thin-plate-like material main body (Fig. 9, #15).

Regarding claim 26, Hamuro et al. discloses a thin-plate-like protective film comprising a long thin-plate-like material main body which protects a long protected thin-plate-like material structure (Fig. 1, #1), wherein conductive layers (Figs. 1-4, #2, #2a, #2b) are provided at least in areas of the thin-plate-like material main body other than at its widthwise opposite ends.

Regarding claim 27, the conductive layers are provided on respective surfaces of the thin-plate-like material main body (Fig. 1, #2).

6. Claims 1-4, 7-23 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakurai (US 6,216,419).

Sakurai discloses a thin plate-like protective film comprising a thin plate-like material main body (Fig. 3, #11) which protects a protected thin plate-like material structure, wherein projections (Fig. 3, #11A) are arranged continuously in predetermined areas of the thin plate-like

material main body so as to extend from the main body, the projections each having a crown portion (Fig. 4B, #11CY), a surface of which is substantially parallel with a main surface of the protected thin plate-like material structure, and a side wall portion surrounding the crown portion. Regarding claim 2, a surface of the crown portion is a plane (Fig. 4B, #11CY). Regarding claim 3, the crown portion is provided with a plurality of contacts (Fig. 4C, #11CY). Regarding claim 4, the side wall portion is inclined (Fig. 4B, #11CY). Regarding claim 7, the plurality of projections have an equal width in the direction in which the projections are arranged (Fig. 4A, #11A). Regarding claim 8, the plurality of projections have different widths in the direction in which the projections are arranged (Fig. 4B, 11A). Regarding claim 9, the plurality of projections are line-symmetrically arranged (Fig. 4, #11A). Regarding claim 10, the plurality of projections are non-line symmetrically arranged (Fig. 4, #11A). Regarding claims 11-13, a gap portion (Fig. 4, between #11A) is formed between the plurality of projections (Fig. 4, #11A) wherein some of the plurality of gap portions have an equal width and some have different widths. Regarding claim 14, the projection is generally trapezoidal as viewed from an end surface side of the thin-plate-like material main body (Fig. 4, #11A). Regarding claim 15, the projection is u-shaped as viewed from one surface side of the thin-plate-like material main body (Fig. 5A, #12). Regarding claim 16, the projection is generally semicircular as viewed from one surface side of the thin-plate-like material main body (Fig. 6A, #12B). Regarding claims 17 and 18, the protected thin-plate-like material structure comprises interconnect patterns and electronic components (Fig. 6, #13) so that the predetermined areas of the thin plate-like material main body are not superimposed on the interconnect patterns or electronic components. Regarding claim 19, the electronic components are semiconductor chips (see col. 5, lines 11-13). Regarding



claim 20, the thin-plate-like material main body is long enough to protect the protected thin-plate-like material structure which is also long (Fig. 3 and Fig. 4A, #11). Regarding claim 21, the protected thin-plate-like material structure comprises sprocket holes (see col. 7, lines 15-21) so that the predetermined areas of the thin plate-like material main body are in proximity to the sprocket holes. Regarding claim 22, the protected thin-plate-like material structure comprises sprocket holes (see col. 7, lines 15-21) at its widthwise opposite ends, and the predetermined areas of the thin-plate-like material main body are widthwise opposite ends of the thin-plate-like material main body. Regarding claim 23, the thin-plate-like material main body has a sheet form so as to protect the protected thin-plate-like material structure, which also has a sheet form (see Fig. 3, #11). Regarding claim 25, the predetermined areas of the thin-plate-like material main body are at least four side areas of the thin-plate-like material main body (Fig. 3, #11A).

Regarding claim 26, Sakurai discloses a thin-plate-like protective film comprising a long thin-plate-like material main body which protects a long protected thin-plate-like material structure (Fig. 3, #11), wherein conductive layers (Fig. 6, #13) are provided at least in areas of the thin-plate-like material main body other than at its widthwise opposite ends. Regarding claim 27, the conductive layers are provided on respective surfaces of the thin-plate-like material main body (Fig. 6, #13).

### ***Conclusion***


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501.

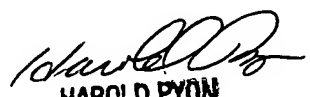
The examiner can normally be reached on 9:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Catherine A. Simone  
Examiner  
Art Unit 1772  
March 18, 2005

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

3/18/05